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(54) Title: PERFUMING OF TEXTILES AND SANITARY ARTICLES

(57) Abstract

The use of a liquid, water–free composition for the perfuming of materials having a porous and/or absorbent surface is described, this composition being composed of at least one volatile silicone oil, at least one perfuming ingredient and optionally a volatile organic solvent. Various materials can be perfumed according to the method described. Materials include textiles, like socks or tights, paper, like facial tissues or paper napkins, or sanitary articles.

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Perfuming of textiles and sanitary articles

Technical Field

The present invention relates to a water-free liquid composition for perfuming materials having porous and/or absorbent surfaces, a method for perfuming the said materials and a perfumed material.

Prior Art

Perfuming ingredients do not only find use in the production of perfumes, but are variously used e.g. for the perfuming of soaps, deodorants and other body care products, as well as for detergents and cleaners.

In this context the perfuming ingredients are employed either in a pure state or in the form of mixtures which typically are either alcoholic or aqueous-alcoholic mixtures, or aqueous or aqueous-glycolic mixtures comprising a solubilizer.

The term "alcoholic" mixtures in the present context serves to designate mixtures of the perfuming ingredients with 96% ethanol.

Perfuming ingredients are also used for perfuming materials having porous and/or absorbent surfaces.

Various methods are known for perfuming such materials, in particular textiles. On the one hand, the perfuming composition is incorporated into or applied onto the fibers which are then processed into the corresponding textiles during production. In this case, the fragrance is perceivable at a relatively uniform intensity before, during and after wearing and after laundering.

In many cases, however, the perfumed garments should not interfere with the perfumes of articles like deodorants, body lotions or colognes which may be used by the consumer. In other words, the garment should not evoke a "perfumed" impression. Upon unpacking it should have an agreeably "clean" fragrance which may well intensify through the warmth of the skin, however should not persist beyond the first laundry. In this respect, perfuming in accordance with the prior art represents a drawback. Another

drawback of this known method resides in the fact that the production of perfumed fibers renders production of such textiles altogether substantially more costly.

Moreover, incorporation of the perfuming ingredients into the fibers has the effect that a considerable portion of these will remain in the fibers for a long time and, in the extreme case, will not contribute to the fragrance. If the perfuming ingredients are, on the other hand, applied onto the fibers, disagreeable odor emissions are caused in the production halls during the production of the textiles. For these reasons it would be desirable if perfuming could be performed subsequent to the production of the textiles.

Another method for perfuming textiles is to perfume these concurrently with the dyeing process. For this purpose, the perfuming ingredients are added to the dye bath. The large surface area of such dye baths and the vapor pressure of the dyeing solution result in a high odor emission in the production halls, which is not desirable with respect to workers' protection regulations. This method moreover brings about a very high consumption of perfuming ingredients owing to the large volumes of such dye baths. This results in environmental impacts, in particular of waste water.

It is another drawback of the above method that the subsequent drying process is performed at relatively high temperatures, possibly resulting in uncontrollable modifications if not the destruction of delicate perfuming ingredients.

It is therefore desirable to dispose of a process for perfuming which process only requires minimum amounts of perfuming ingredients, and avoids that subsequent drying at high temperatures.

Problems also occur when the above-mentioned alcoholic, aqueous-alcoholic, aqueous or aqueous-glycolic mixtures are used for perfuming various materials such as textiles, sanitary articles, e.g. diapers or sanitary napkins, or paper tissues, e.g. paper handkerchiefs, paper napkins or paper facial tissues.

The above-described mixtures, for example, have the drawback of interacting with many materials likely to get into contact with them, e.g. garments, possibly resulting in the formation of stains on these materials, with the above mentioned solubilizers resulting in particularly pronounced staining.

Apart from this, the colors of the materials will frequently also be impaired by the mixtures of perfuming ingredients, possibly resulting in discoloration or even decoloration.

The above-described drawbacks should thus be avoided when various materials are perfumed using perfuming ingredients.

Various materials treated with an aqueous and/or alcoholic mixture of perfuming ingredients furthermore show the problem that the moisture present on the materials may induce modifications of the packages used for these materials, such as foils and cardboard inserts. In the worst case this moisture may even cause moulding such as damp stains.

Another important aspect lies in the fact that it is often desirable to avoid the presence of alcohol in perfumed materials which enter into close and/or prolonged contact with the human skin. This is in particular the case in sanitary articles like, for example, diapers, sanitary napkins or incontinence products, but also in applications like, for example, handkerchiefs or facial tissues.

Alcoholic or aqueous-alcoholic mixtures moreover often impart a strong "lift" to the highly volatile constituents of the mixture of perfuming ingredients, i.e. the top note of the perfume will be perceived quite intensely for a short period of time and vanish rapidly. This effect, too, can impart the undesirable "perfumed" impression, when opening the packaging.

The prior art does not describe a method for the perfuming of materials having porous and/or absorbent surfaces which allows to avoid the drawbacks as laid out above.

The Japanese document JP 05201851 (Kokkai) describes a cleaning composition for the removal of dirt and cosmetics from the human skin which contains a volatile silicone oil, e.g. hexamethylcyclotrisiloxane or octamethylcyclotetrasiloxane, and a non-volatile polymethylphenylsiloxane. The said mixture may contain a perfume.

European Patent Application EP 527 496 describes an impregnating composition for leather or textiles which contains an impregnating agent, a volatile silicone, e.g. octamethylcyclotetrasiloxane or octamethyltrisiloxane, optionally a leather care agent and/or a perfume.

In DE 42 37 257, there is disclosed a deodorizing composition for the application to human skin. Said composition comprises a volatile silicone oil, e.g. DC Fluid 1465 (Dow Corning), a short-chain monovalent alcohol and a perfume which must have a deodorizing effect.

All these prior art references are completely silent about the use of the disclosed compositions for the perfuming of materials having a porous and/or absorbent surface.

Description of the Invention

It is therefore one object of the present invention to provide a method for the perfuming of materials having porous and/or absorbent surfaces which avoids the various drawbacks as laid out above.

This object is obtained by the use of a liquid, water-free composition being composed of at least one volatile silicone oil and at least one perfuming ingredient and optionally one or more organic solvents for the perfuming of materials having porous and/or absorbent surfaces.

It is a further object of the present invention to provide a composition which can be used for the perfuming of materials having a porous and/or absorbent surface.

This object is attained by a liquid, water-free composition composed of at least one volatile silicone oil and at least one perfuming ingredient and optionally one or more organic solvents, provided that said composition does not contain a perfume which has a deodorizing effect.

The term "free of water" in this context is meant to signify that, in contrast with a customary practice in perfume technology, dilution with water is avoided in the present invention. The composition should contain less than 1% (wt.) water, preferably less than 1000 ppm, in particular approx. 250 ppm or less.

The composition of the invention has the advantage of gradually developing the fragrance. In contrast to the known alcoholic or aqueous-alcoholic mixtures, the mixture of the present invention does not show a strong lift. In perfumed textiles, the scent prevails as long as until the first laundry. After the first laundry, however, practically no odor is perceivable any more.

A further advantage of the composition and, respectively, of the method for perfuming materials of the invention, is that it allows to cover odors inherently owing to certain production technologies or materials which, for instance, may be caused by chemical treatment during the production process. The perfumed material does not release a strong fragrance. Rather a neutral, clean smell that covers the mentioned unpleasant odors is perceived when the packaging is opened.

If desired, the perfuming composition may contain ingredients which form longer-lasting heart and base notes of a perfume. These notes will then develop slowly, within a certain time. In certain applications, which may be textiles like, e.g. socks or tights, or hygiene articles, like diapers, the said notes will develop more rapidly due to the

warmth of the skin and create a desired fragrance which gives the impression of a light and subtle freshness.

Visible staining does not occur with the composition of the invention. It evaporates entirely, without leaving any residues to the materials.

The composition of the invention thus presents the further advantage that the perfumed materials are not adversely affected by moisture, whereby mildewing is also precluded.

Thus the composition of the invention may be utilized with packaged materials without interaction with the packaging material such as cellophane, other foils or sheets, or carton inserts.

The liquid composition preferably is a clear solution or mixture, i.e. it should in particular be a single phase and homogeneous and should not contain any solid constituents in order to avoid malfunctions, particularly clogging of nozzles when automatic machinery is used in the perfuming process.

The used materials have a porous and/or absorbent surface such that the composition may be absorbed as completely as possible.

Appropriate volatile silicone oils are oligosiloxane compounds and oligocyclosiloxane compounds having boiling points of approx. 100°C to approx. 300°C. Examples for preferred volatile silicone oils include the following : silicone oils known in the art under the name Cyclomethicone, i.e. polydimethyl cyclosiloxanes, such as octamethyl tetrasiloxane, decamethyl cyclopentasiloxane and dodecamethyl cyclohexasiloxane and any mixture of these ; silicone oils known under the name Dimethicone, i.e. polydimethyl siloxanes, such as hexamethyl disiloxane, octamethyl trisiloxanes or decamethyl tetrasiloxane or any mixtures thereof ; and any mixtures of the above-specified silicone oil types. These oils are sold by various companies under various trade names, for example :

Dow Corning : Fluids DC 244, 245, 246, 344 EU, 345 EU (cyclomethicone mixtures) ; Fluid DC 200 (dimethicone mixture)

General Electric Silicones : SF 1173, 1202, 1204 (cyclomethicone mixtures) ; SF 1214 (mixture of cyclomethicone and dimethicone) ; SF 96 (dimethicone mixture)

Wacker Silicones : Siloxane F 222, 223, 250, 251 (cyclomethicone mixtures) ; Siloxane F 221, Silicone Fluid SF 96, SWS 101 (dimethicone mixtures)

Chemische Fabrik Th. Goldschmidt AG : Abil ® K4, B 8839 (cyclomethicone mixture) ; Abil ® 10-10000 (dimethicone mixture).

As regards the perfuming ingredients in the composition of the invention, these may be any compound of natural, semi-synthetic or synthetic origin which is known in the art as a useful perfuming ingredient, or mixtures thereof. It is preferred if the perfuming ingredient is soluble in the volatile silicone oil and preferably miscible with it in any ratio. This has the advantage that virtually any ratio of volatile silicone oil and perfuming ingredient or ingredients in the composition may be adjusted as depending on the intensity of the used perfuming ingredient or ingredients. A solubilizer is not required in the composition of the invention.

The composition may thus contain 99.9 - 10% (wt.) volatile silicone oil and 0.1 - 90% (wt.) perfuming ingredient, preferably 99 - 50% (wt.) volatile silicone oil and 1 - 50% (wt.) perfuming ingredient, and in particular 99 - 70% (wt.) volatile silicone oil and 1 - 30% (wt.) perfuming ingredient. The composition does not comprise any non-volatile substances, as this is the only way to ensure that it will completely evaporate from the scented materials without leaving any residues.

The composition of the invention may, nevertheless, additionally contain one or several non-volatile substances, such as a non-volatile silicone oil, whenever an evaporation which does not leave residues is not mandatory. Such non-volatile silicone oils are selected from the group consisting of silicone glycol copolymers, e.g. those having polyoxyethylene or polyoxypropylene chains, polyphenylmethyl siloxanes, non-volatile polydimethyl siloxanes, as well as any mixtures thereof. It is however preferred to use compositions only composed of volatile silicones.

The non-volatile substances should not amount to more than 10% (wt.), preferably not more than 3% (wt.), based on the total weight of the composition.

The composition preferably does not contain any additional organic solvents besides the volatile silicone oils. Such solvents might have a negative impact on the scented materials, e.g. textiles and sanitary articles, and their packaging. In the case of relatively resistant materials, however, one or several organic solvents may additionally be present.

The said organic solvents are preferably selected from the group consisting of hydrocarbons, monovalent and polyvalent alcohols, ketones, esters, ethers and any mixtures of the solvents. Particularly preferred solvents are low molecular weight monovalent alcohols, such as propanol, in particular ethanol, as well as any mixtures thereof.

The organic solvent should not amount to more than 10% (wt.), preferably not more than 3% (wt.), based on the total weight of the composition.

When no such organic solvent is used, the composition is particularly appropriate for the perfuming of articles which enter into close contact with the human skin or with mucous membranes, as is the case in, for example, diapers, sanitary napkins, handkerchiefs, incontinence products or facial tissues.

The composition of the invention preferably has a flash point which is higher than 61°C. By this, technical safety problems are drastically reduced, e.g. flammability in connection with electrical contacts in machinery.

The application of the composition onto the material may be effected by spraying, dripping or immersion, or any other method current in the art.

In the case of materials which are packaged, it is particularly advantageous that the composition of the invention, due to the utilized silicone oils and their volatility, will distribute in the textiles by itself.

A further object of the present invention are perfumed materials having porous and/or absorbent surfaces which result from the use of the composition according to the present invention.

The respective material may be a natural or synthetic material.

The material may e.g. be selected from textiles, wood, paper, cardboard, a cardboard article, a fibrous material, a plant and ceramic.

Examples of textiles include in particular stockings, socks or tights, shirts, underwear, tablecloths, bed sheets and pillow cases.

Further examples of suitable materials include sanitary articles, such as a baby napkin, a diaper, a sanitary napkin, a panty liner, an incontinence product, a paper handkerchief, a paper napkin, toilet paper or a facial tissue.

Further advantages and features of the present invention spring out from the following working examples and the drawing, wherein:

Fig. 1 is a diagram representing the fragrance intensity depending on the time for prior art compositions and compositions according to the invention.

Particularly preferred embodiments of the present invention will now be described in the following examples. Unless specified otherwise, percentages are indicated as % by weight.

Embodiments of the Invention

Example 1

Perfuming composition 1 :	Hexylcinnamic aldehyde	1500 mg
	Lilial ® 1)	300 mg
	Portugal floride	50 mg
	(Z)-3-Hexen-1-ol	5 mg
	Geraniol	100 mg
	Linalool	100 mg
	Phenylethyl alcohol	250 mg
	Exaltolide ® 2)	45 mg
	Muscone	10 mg
	Exaltex ® 2)	20 mg
	Ethylene Brassylate	200 mg

1) origin : Givaudan-Roure SA, Vernier, Switzerland

2) 15-pentadecanolide ; origin : Firmenich SA, Geneva, Switzerland

The above-specified perfuming composition 1 can be mixed with, for example, DC 344 and DC 345 in various proportions to obtain compositions which may directly be employed for the perfuming of various materials. Specific examples are found below.

"DC 344" indicates the commercially available "Volatile Silicone Fluid 344 EU" by Dow Corning Corp., whereas "DC 345" indicates the "Volatile Silicone Fluid 345 EU", also by Dow Corning Corp. DC 344 is composed of approx. 3 parts octamethyl cyclotetrasiloxane and approx. 1 part decamethyl cyclopentasiloxane. DC 345 is composed of approx. 3 parts decamethyl cyclopentasiloxane and approx. 1 part dodecamethyl cyclohexasiloxane and furthermore contains small quantities of octamethyl cyclotetrasiloxane.

It is also possible to replace, partially or totally, DC 344 or D 344 by the silicone oil SF 1202 (General Electric Silicones), which is mainly composed of decamethyl cyclopentasiloxane. Good results were obtained with the following mixture :

10%	perfuming composition 1
25%	DC 344
53%	DC 345
12%	SF 1202

Example 2

Perfuming composition 2 :	Hexylcinnamic aldehyde	500 mg
	C 10-aldehyde	5 mg
	Orange terpenes	245 mg
	Methylionone	200 mg
	Iso E Super [1)]	300 mg

1) origin : International Flavors & Fragrances, USA

As in the above example 1, the resulting perfuming composition can be mixed with, for example, DC 344 and DC 345 in various proportions to obtain compositions which may directly be employed for the perfuming of various textiles.

Example 3

In this test the evaporation properties of prior art compositions and of compositions according to the invention were examined.

The respective constituents of the examined compositions are given in Table 1.

Table 1

	1	2	3	4	5	6
Composition	15% Perfuming composition 1 80% ethanol[1)] 5% water	15% Perfuming composition 1 85% ethanol[1)]	15% Perfuming composition 1 42.5% DC 344 42.5% DC 345	15% Perfuming composition 1 10% ethanol[2)] 37.5% DC 344 37.5% DC 345	5% Perfuming composition 1 47.5% DC 344 47.5% DC 345	25% Perfuming composition 1 37.5% DC 344 37.5% DC 345
Time [min.]	**Evaporation loss [g]**					
30	3.15	3.06	0.29	1.24	0.31	0.28
60	7.23	5.50	0.57	1.54	0.61	0.54
120	8.50	8.48	0.86	2.85	1.01	0.81
180	8.51	8.50	1.13	2.14	1.21	1.09
240	8.54	8.53	1.62	2.62	1.73	1.56

1) 96% ethanol

2) 100% ethanol (abs.)

Compositions 1 and 2 represent prior art compositions whereas compositions 3 to 6 are in accordance with the invention.

10 g each of these compositions were filled into 150-ml beakers and heated to 45°C. The beakers were weighed before the beginning of the experiment and at the specified times. The respective evaporation losses were noted and are indicated in Table 1.

Table 1 shows that the aqueous-alcoholic composition 1 has by far the highest evaporation loss, with approx. 85% of the composition already having evaporated after 120 minutes, enabling only very short-term perfuming.

Composition 2, which contains the said perfuming composition 1 and 96% ethanol only, also shows a relatively high evaporation loss. Although evaporation is initially slower than in the above composition, approx. 85% of composition 2 have also evaporated after 120 minutes.

Compositions 3, 5 and 6 according to the invention have about identical evaporation properties. After 240 minutes, approx. 15 to 17 % of the respective composition have evaporated. The evaporation behavior is moreover relatively linear. It is therefore possible to achieve the desired gradual fragrance release with the compositions of the invention.

Composition 4 of the invention, which additionally contains 10% absolute ethanol as further organic solvent besides the said mixture of perfuming ingredients and the volatile silicone oils, was found to have an evaporation loss of approx. 26% after 240 minutes. Under the aspect of its evaporation properties, it is therefore comparable to the previously described compositions 3, 5 and 6 of the invention.

This test thus demonstrates that evaporation is clearly reduced for the compositions of the invention as compared to the prior art compositions. It is therefore possible to achieve the desired gradual fragrance release with the compositions of the invention.

Example 4

It was examined to what extent the different compositions cause staining on different materials. These tests were performed on white test samples of 90% polyamide/10% Elasthan, 100% cotton and 100% silk having a format of approx. 10 × 10 cm.

For this purpose, 0.5 g each of the respective test fluid were applied onto the respective test sample. The impregnated zones had a diameter of approx. 4 to 6 cm. The test samples

were left to dry overnight at room temperature and inspected on the next day. The results are given in Table 2.

Table 2

	Composition	90% polyamide 10% elasthan	100% cotton	100% silk
1	15% Perfuming composition 1 42.5% DC 344 42.5% DC 345	no visible staining	no visible staining	no visible staining
2	15% Perfuming composition 1 10% ethanol abs. (100%) 37.5% DC 344 37.5% DC 345	no visible staining	no visible staining	no visible staining
3	5% Perfuming composition 1 47.5% DC 344 47.5% DC 345	no visible staining	no visible staining	no visible staining
4	25% Perfuming composition 1 37.5% DC 344 37.5% DC 345	no visible staining	no visible staining	no visible staining
5	100% Perfuming composition 1	strong staining	slight staining	strong staining
6	50% DC 344 50% DC 345	no visible staining	no visible staining	no visible staining
7	15% Perfuming composition 1 15% solubilizer LRI[1)] 50% ethanol (96-%) 20% water	strong staining	strong staining	strong staining

1) Solubilizer, containing PPG-Buteth-26 and PEG-40 Hydrogenated Castor Oil ; origin : Wackherr, France

It was found that the compositions of the invention (items 1 to 4 of Table 2) did not result in visible staining on any one of the examined test samples. The pure perfuming composition 1 (item 5 of Table 2) resulted in strong staining in the case of 90% polyamide/10% elasthan and 100% silk, and in slight staining in the case of 100% cotton. The mixture containing only volatile silicone oils (item 6 of Table 2) did not result in any recognizable staining on any one of the examined textiles. The aqueous-alcoholic mixture

of the prior art (item 7 of Table 2), which contained a customary solubilizer, caused strong staining on all of the examined textiles.

Example 5

In order to evaluate the variation in time of the fragrance intensity of a composition according to the present invention as compared with a prior art composition, 0.05 g each of compositions 1 and 3 in accordance with Example 3 was applied onto smelling strips. At different points of time, the fragrance intensities of the smelling strips thus prepared were evaluated by 30 panel members. Each member received a smelling strip with composition 1 and a test strip with composition 3. Evaluation was performed on a scale of 7 points, with 1 representing a weak fragrance and 7 an intense fragrance. The evaluations awarded by the different members were averaged.

Fig. 1 represents the variation in time of the determined intensities of fragrance over 24 hours. It can be found that prior art composition 1 initially shows a high fragrance intensity which, however, declines rapidly. Composition 3 according to the invention initially shows a somewhat lower fragrance intensity. The decline of this intensity, however, occurs at a substantially slower rate. This also shows the gradual fragrance release of the composition according to the present invention.

Example 6

A composition which was composed of 15% of perfuming composition 1, 42.5% of DC 344 and 42.5% of DC 345 was prepared. 0.15 g of said composition were applied to a pair of tights (90% polyamide, 10% elasthan, weight 25 g). The tights were folded up and packaged in the usual manner (cardboard and plastic sheet). Upon unpackaging of the tights after several weeks, these did not present the typical, somewhat disagreeable artificial odor, but exhaled a fragrance which evoked a subtle, desired freshness. No formation of stains or moulding on the tights or the cardboard package could be observed. Upon wearing of the tights, the fragrance lasted for several hours.

Example 7

A composition which was composed of 20% of perfuming composition 2, 16% of DC 344 and 64% of DC 345 was prepared, and 0.05 g were applied to paper handkerchiefs (10 pieces, corresponding to 1 package, overall weight 20 g). The folded handkerchiefs were then wrapped into plastic. After having been stored for several weeks, the handkerchiefs were unwrapped. They exhaled a nice subtle fragrance which remained on the material for several hours. The formation of stains or moulding on the paper could not be observed.

Example 8

A composition was prepared from 15% of perfuming composition 1, 34% of DC 344 and 51% of DC 345. 500 mg of this composition were applied to the inner cardboard sheet of a kitchen roll having a weight of 200 g which was subsequently wrapped into plastic. When the roll was unwrapped after several weeks, it was found that every paper napkin or sheet had acquired a subtle, fresh fragrance, without any formation of stains or moulding being observed.

Example 9

A composition was prepared from 10% of perfuming composition 2, 27% of DC 344 and 63% of DC 345. This composition was used to perfume facial tissues, in an amount of 400 mg per 100 tissues. The tissues where then packaged into a cardboard box (175 g per box). Upon unpackaging after several weeks, every tissue exhaled a nice, clean fragrance. Again, no stain forming or moulding on the tissues during storage had occurred.

Claims

1. Use of a liquid, water-free composition composed of at least one volatile silicone oil and at least one perfuming ingredient and optionally one or more organic solvents, for the perfuming of materials having porous and/or absorbent surfaces.

2. Use according to claim 1, characterized in that said volatile silicone oil is selected from the group consisting of polydimethyl cyclosiloxanes, such as octamethyl cyclotetrasiloxane, decamethyl cyclopentasiloxane or dodecamethyl cyclohexasiloxane, and polydimethyl siloxanes, such as hexamethyl disiloxane, octamethyl trisiloxane or decamethyl tetrasiloxane, as well as any mixtures thereof.

3. Use according to claim 1 or 2, characterized in that said perfuming ingredient is a natural, semi-synthetic or synthetic substance of current use in perfumery or a mixture of such substances.

4. Use according to any of claims 1 to 3, characterized in that said perfuming ingredient is soluble in the volatile silicone oil and preferably miscible with the latter in any ratio.

5. Use according to any of claims 1 to 4, characterized in that said composition contains 99.9 - 10% (wt.) volatile silicone oil and 0.1 - 90% (wt.) perfuming ingredient, preferably 99 - 50% (wt.) volatile silicone oil and 1 - 50% (wt.) perfuming ingredient, and in a particularly preferred manner 99 - 70% (wt.) volatile silicone oil and 1 - 30% (wt.) perfuming ingredient.

6. Use according to any of claims 1 to 4, characterized in that said organic solvent is selected from the group consisting of hydrocarbons, monovalent and polyvalent alcohols, ketones, esters and ethers, as well as any mixtures thereof.

7. Use according to claim 6, characterized in that said organic solvent is selected from low molecular weight monovalent alcohols, such as propanol and in particular ethanol, as well as any mixtures thereof.

8. Use according to claim 6 or 7, characterized in that said composition contains up to 10% (wt.), preferably up to 3% (wt.), of said organic solvent based on its total weight.

9. Use according to any of the preceding claims, characterized in that said composition is applied to the materials by spraying, dripping or immersion.

10. A perfumed material resulting from the use according to any of claims 1 to 9.

11. Material according to claim 11, characterized by said material being a natural or synthetic material.

12. Material according to claim 10 or 11, characterized by said material being selected from the group consisting of a textile, wood, paper, cardboard, a cardboard article, a fibrous material, a plant and ceramic.

13. Textile according to claim 12, being chosen amongst a shirt, underwear, a table cloth, a bed sheet or a pillow case.

14. Textile according to claim 12, being chosen amongst a stocking, socks or tights.

15. Material according to claim 11, characterized in that said material is a sanitary article.

16. As a material according to claim 15, a baby napkin, a diaper, a sanitary napkin, a panty liner, an incontinence product, a tissue handkerchief, a paper napkin, toilet paper or a facial tissue.

17. A liquid, water-free composition composed of at least one volatile silicone oil and at least one perfuming ingredient and optionally one or more organic solvents, provided that said composition does not contain a perfume which has a deodorizing effect.

18. The composition according to claim 17, characterized in that said volatile silicone oil is selected from the group consisting of polydimethyl cyclosiloxanes, such as octamethyl cyclotetrasiloxane, decamethyl cyclopentasiloxane or dodecamethyl cyclohexasiloxane, and polydimethyl siloxanes, such as hexamethyl disiloxane, octamethyl trisiloxane or decamethyl tetrasiloxane, as well as any mixtures thereof.

19. The composition according to claim 17 or 18, characterized in that said perfuming ingredient is a natural, semi-synthetic or synthetic substance of current use in perfumery or a constituent of a mixture of said substances.

20. The composition according to any of claims 17 to 19, characterized in that said perfuming ingredient is soluble in the volatile silicone oil and preferably miscible with the latter in any ratio.

21. The composition according to any of claims 17 to 20, characterized by containing 99.9 - 10% (wt.) volatile silicone oil and 0.1 - 90% (wt.) perfuming ingredient, preferably 99 - 50% (wt.) volatile silicone oil and 1 - 50% (wt.) perfuming ingredient, and in a particularly preferred manner 99 - 70% (wt.) volatile silicone oil and 1 - 30% (wt.) perfuming ingredient.

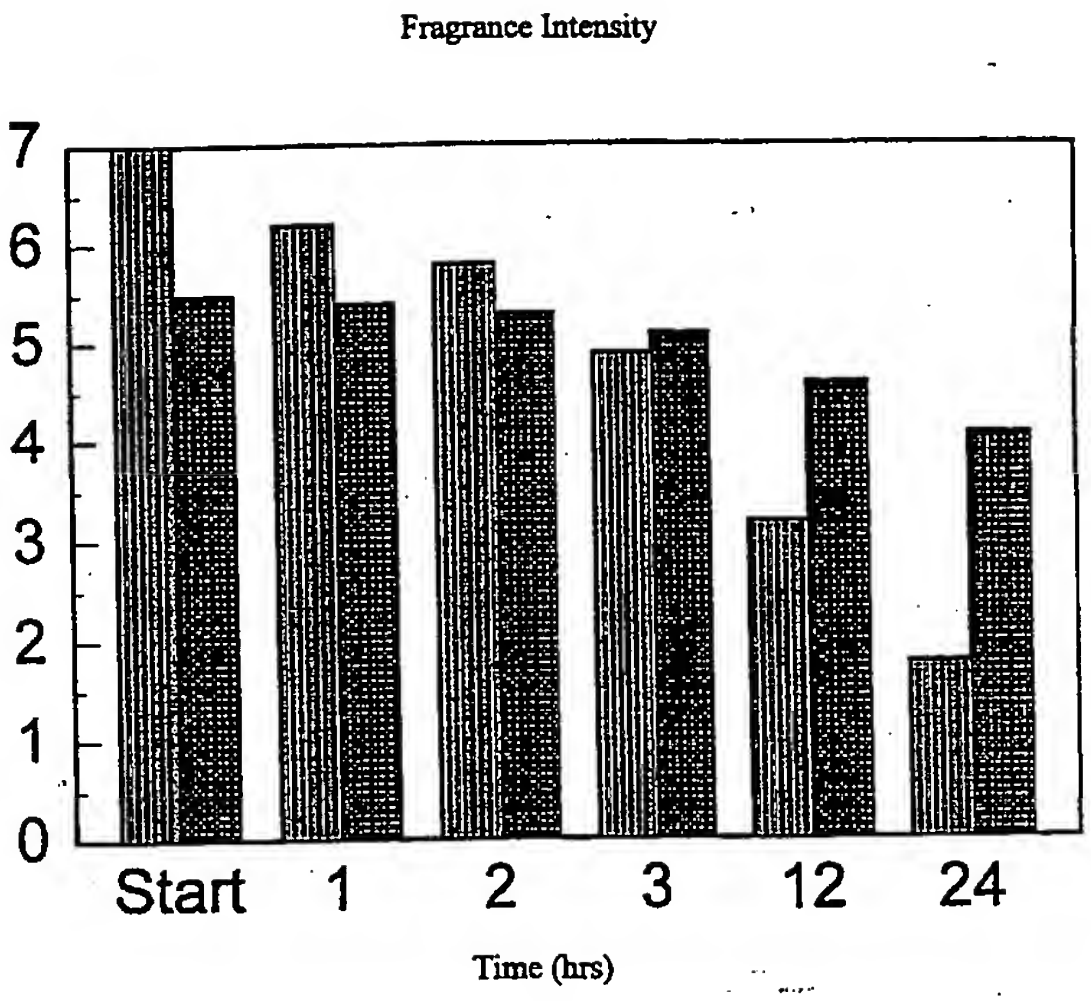
22. The composition according to any of claims 17 to 20, characterized in that said organic solvent is selected from the group consisting of hydrocarbons, monovalent and polyvalent alcohols, ketones, esters and ethers, as well as any mixtures thereof.

23. The composition according to claim 22, characterized in that said organic solvent is selected from low molecular weight monovalent alcohols, such as propanol and in particular ethanol, as well as any mixtures thereof.

24. The composition according to claim 22 or 23, characterized in that said composition contains up to 10% (wt.), preferably up to 3% (wt.), of said organic solvent based on its total weight.

25. The composition according to any of claims 17 to 24, characterized by a flash point of above 61°C.

1 / 1



n = 0
Scale of 7 points (1 = weak / 7 = intense)
Applied amount : 0.05 g / strip

15% Perfuming composition 1
80% Ethanol (96%), 5% water

15% Perfuming composition 1
42.5% DC 344 ; 42.5% DC 345

INTERNATIONAL SEARCH REPORT

Internati· Application No
PCT/IB 98/01025

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61K7/46 B27K5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 A61K B27K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE WPI Week 9336 Derwent Publications Ltd., London, GB; AN 93-285358 XP002078595 & JP 05 201851 A (TOSHIBA SILICONE) , 10 August 1993 cited in the application see abstract	1,9-12, 15-18
X	EP 0 527 496 A (WERNER & MERTZ) 17 February 1993 cited in the application see page 3, line 37-39 see page 4, line 17 - page 5, line 36 see page 6, line 20-22; claims 1-3,12,13	1,2,6,7, 9-12,17, 22,23

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
24 September 1998	16/10/1998

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Van Bellingen, I

1

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INTERNATIONAL SEARCH REPORT

Internati Application No
PCT/IB 98/01025

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	GB 2 314 025 A (ANTHONY CLIVE UMFREVILLE FISHER) 17 December 1997 see claims 1-6	1,3,4,6, 7,9,10, 12
A		17,19, 20,22,23
X	EP 0 118 625 A (DR. O. MARTENS & CO.) 19 September 1984 see claims 1,5	1,3,10, 11,17, 19,20

Form PCT/ISA/210 (continuation of second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

Information on patent family members

Internati: Application No
PCT/IB 98/01025

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		AT 153048 T	15-05-1997
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		AU 2428884 A	16-08-1984
		JP 59155254 A	04-09-1984